

# E-Cigarettes: A Dangerous Trend

The growing popularity of vaping devices is putting teens' health at risk.

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FEWER TEENS ARE SMOKING cigarettes than ever before. But in recent years another trend has replaced it. More middle and high school students now use electronic cigarettes than any other nicotine-containing product. In fact, according to a recent National Institutes of Health study, nearly a third of 12th-graders reported using vaping devices within the past year.

This trend has health officials concerned. Even though e-cigarettes are believed to be safer than tobacco, scientists know very little about the risks associated with them. After all, they have only existed for about 15 years. Most troubling: Almost all e-cigarettes contain nicotine, the same highly addictive chemical found in tobacco cigarettes.

## What Are E-Cigarettes?

Also known as e-vaporizers or vape pens, e-cigarettes are battery-operated devices. Some look like tobacco cigarettes, but many designs look like everyday items such as pens or USB sticks. The devices often include replaceable cartridges or “pods,” which contain a liquid that is a mix of different chemicals, such as flavor compounds and, in most cases, nicotine. When a person puffs on the device, called “vaping,” the liquid inside is heated into a vapor that is inhaled.

## Vapor vs. Smoke

The scariest part of the vaping trend is that teens don't perceive e-cigarettes to be hazardous to their health. This could be because e-cigarettes produce vapor instead of harsh smoke like traditional cigarettes do. Some even have candy-like flavors.

Incredibly, there was once a time when people didn't know the dangers of tobacco cigarettes. Up until the 1950s, doctors were frequently shown in ads promoting smoking. Now we know that tobacco smoke contains thousands of chemicals, including at least 70 known to cause cancer. It's also responsible for 480,000 U.S. deaths each year.

That's why health officials fear what we don't know yet about vaping. E-cigarettes are still so new that scientists haven't had time to determine all of their effects. Recent studies have revealed that some e-cigarette vapor contains cancer-causing substances. In addition, some e-cigarettes release other toxic materials, such as cadmium, a metal that can cause breathing problems.

## They're Just as Addictive

One important risk we do know: Like tobacco, most e-cigarettes contain the highly addictive chemical nicotine. In fact, one cartridge can contain as much nicotine as a whole pack of tobacco cigarettes!

Scientists have found that people who use nicotine have a high chance of becoming addicted to it. This



“E-cigarettes can lead teens to use tobacco cigarettes.”

is especially true for teens, who are at a higher risk of addiction than adults. Studies have shown that nicotine's effect on teens may make them more vulnerable to becoming addicted to other drugs too.

There is conclusive evidence that completely switching from traditional cigarettes to e-cigarettes provides health benefits to adults who already smoke. That's only because tobacco cigarettes are even less safe than e-cigarettes. E-cigarettes are not safe, however, for nonsmokers or teens. E-cigarettes can lead teens to use tobacco cigarettes. In a recent study, 30 percent of teen e-cigarette users started smoking tobacco cigarettes within six months of vaping for the first time, compared with only 8 percent of those who didn't vape.

## What's Next?

Health officials are beginning to increase regulations on the devices to help keep teens safe. In most states, it is illegal to sell e-cigarettes to people under the age of 18, but teens are still getting them anyway. Officials are also cracking down on retailers who sell to teens illegally as well as on companies that are marketing e-cigarettes to young people.

Scientists are continuing to learn about the health effects of e-cigarettes. But there is already enough evidence about the dangers of e-cigarettes to make one thing clear: Using them is not worth the risk for teens.

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